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| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------|-------------|---------------|----------------------|---------------------|------------------|--|
| 09/762,006 | 02/01/2001 | | Thomas Hottkowitz | 2923-123 | 6539 | |
| 6449 | 7590 | 06/15/2004 | | EXAMINER | | |
| | | , ERNST & MAN | STOCKTON, LAURA | | | |
| 1425 K STR SUITE 800 | EEI, N.W | | | ART UNIT | PAPER NUMBER | |
| WASHING: | TON, DC | 20005 | | 1626 | | |

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | |
|--|---|---|---|---|
| | | 09/762,006 | HOTTKOWITZ, THOMAS | |
| Office Action | n Summary | Examiner | Art Unit | 1 |
| | | Laura L. Stockton, Ph.D. | 1626 | 1 |
| The MAILING DAT Period for Reply | E of this communication ap | pears on the cover sheet w | ith the correspondence address | |
| THE MAILING DATE OF - Extensions of time may be availa after SIX (6) MONTHS from the r - If the period for reply specified at - If NO period for reply is specified - Failure to reply within the set or e | extended period for reply will, by statut later than three months after the mailir | 136(a). In no event, however, may a sly within the statutory minimum of thin will apply and will expire SIX (6) MON e, cause the application to become Al | reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. & 133). | |
| Status | | | | |
| 1) Responsive to com | munication(s) filed on 28 A | <u>//ay 2004</u> . | | |
| 2a) This action is FINA | L. 2b)⊠ Thi | s action is non-final. | | |
| 3) Since this application | on is in condition for allowa | nce except for formal mat | ters, prosecution as to the merits is | |
| | ce with the practice under | | | |
| Disposition of Claims | | | | |
| 4)⊠ Claim(s) <u>1-13,15,3</u> : | 3 and 43-45 is/are pending | in the application. | | |
| | aim(s) is/are withdra | | | |
| 5) Claim(s) is/a | | | | |
| 6)⊠ Claim(s) <u>1-13,15,3</u> ; | 3 and 43-45 is/are rejected | | , ii | |
| 7) Claim(s) is/a | re objected to. | | 4 | |
| 8) Claim(s) are | subject to restriction and/o | or election requirement. | | |
| Application Papers | | | | |
| 9) The specification is | objected to by the Examine | er | | |
| 10) The drawing(s) filed | - · | | by the Examiner | |
| | quest that any objection to the | | | |
| | | - | (s) is objected to. See 37 CFR 1.121(d). | |
| | | | d Office Action or form PTO-152. | |
| | | | 2 - 1100 / 1010 ft of 10111 ft 10-102. | |
| Priority under 35 U.S.C. § 1 | 19 | | | |
| 12) Acknowledgment is | | priority under 35 U.S.C. § | 119(a)-(d) or (f). | |
| a) ☐ All b) ☐ Some * | • | | | |
| | es of the priority document | · | | |
| | es of the priority document | | | |
| | | | received in this National Stage | |
| application fro | om the International Burea | u (PCT Rule 17.2(a)). | | |
| * See the attached deta | ailed Office action for a list | of the certified copies not | received. | |
| | | | | |
| Attachment(s) | | | | |
| 1) Notice of References Cited (P | | 4) Interview S | ummary (PTO-413) | |
| Notice of Draftsperson's Paten Information Disclosure Statem Paper No(s)/Mail Date | nt Drawing Review (PTO-948) ent(s) (PTO-1449 or PTO/SB/08) | | s)/Mail Date Iformal Patent Application (PTO-152) | |
| 6. Patent and Trademark Office | | | | |

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DETAILED ACTION

Claims 1-13, 15, 33 and 43-45 are pending in the application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on May 28, 2004 has been entered.

Election/Restrictions

Applicants' election with traverse of Group XI and the species of compound 372 in Paper No. 9 (filed June 14, 2002) was acknowledged

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in the Office Action mailed July 11, 2002 {Paper No. 10}. The requirement was deemed proper and made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13, 15, 33 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over AT 393505 and Eibl et al. {EP 534,445}, each taken alone. English translations of AT 393505 and Eibl et al. are being provided with this Office Action and will be referred to hereinafter unless otherwise specified.

Determination of the scope and content of the prior art (MPEP §2141.01)

Applicants claim phosphates and phosphoamines. AT 393505 teaches phosphates and phosphoamines which are structurally similar to

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the instant claimed compounds {see pages 3, 4, 17 and 22-25; and especially Example 13 (page 41) and Example 14 (pages 42-43)}. Eibl et al. also teach phosphate esters which are structurally similar to the instant claimed compounds {page 2, lines 25-42 and Example 5 (Beispiel 5) on page 6 in the EP document; and pages 3-8 in the English translation}.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the compounds of the prior art and the compounds instantly claimed is that the instant claimed compounds are generically described in the prior art.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

The indiscriminate selection of "some" among "many" is *prima facie* obvious. The motivation to make the claimed compounds derives from the expectation that structurally similar compounds would possess similar activity (e.g., cytotoxic activity).

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One skilled in the art would thus be motivated to prepare compounds embraced by the prior art to arrive at the instant claimed compounds with the expectation of obtaining additional beneficial products which would have cytotoxic activity and can be used to treat tumors. The instant claimed invention would have been suggested to one skilled in the art and therefore, the instant claimed invention would have been obvious to one skilled in the art.

Response to Arguments

Applicants' arguments filed May 28, 2004 have been fully considered. Applicants argue that the claims, as amended, are unobvious over the compounds in AT 393505 and Eibl et al. Applicants argue that the double bond not being in the same position as it would be in the naturally occurring alcohol or acid allow one to change and specifically control the physical, biochemical and biological properties of the compounds. Applicants allege that such structural variations in the apolar region lead to compounds exhibiting improved antitumor activity.

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Applicants further argue that nothing in the art would motivate one skilled in the art to undertake such modifications.

All of Applicants' arguments have been considered but have not been found persuasive. The above cited prior art generically teach the instant invention as presently claimed. The specific examples prepared in the prior art references differ from Applicants' compounds by a methylene group {e.g., -CH₂-}.

For instance, in comparison of instant claim 1 and Example 14 on pages 42-43 in AT 393505, the difference is a methylene group. See in instant claim 1 wherein p+q is 13 (p is 8 and q is 5) and Example 14 in AT 393505 wherein p+q is 12 (p is 8 and q is 4). The difference being a pentyl group (the value of the instant q variable is 5) in the instant claimed invention versus a butyl group in the prior art (the value of the instant q variable is 4). AT 393505 teach that the "R" variable represents an alkyl residue, having one double bond, with 14 to 20 carbon atoms (page 4, second and third full paragraphs). Therefore, AT 393505 not only prepares a compound that is a homologue of the instant

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claimed compounds but generically teaches the compounds embraced by the instant claims. Therefore, the examples in the prior art would lead one skilled in the art to the instant claimed invention. Further, Applicants have not demonstrated in a side-by-side showing of unexpected beneficial results of the instant claimed compounds over the specie prepared in the cited prior art. The rejection of the claims is deemed proper and is therefore maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura L. Stockton whose telephone number is (571) 272-0710. The examiner can normally be reached on Monday-Friday from 6:15 am to 2:45 pm. If the examiner is out of the Office, the examiner's supervisor, Joseph McKane, can be reached on (571) 272-0699.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The Official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Laura L. Stockton, Ph.D.

Patent Examiner

Art Unit 1626, Group 1620

Technology Center 1600

June 10, 2004